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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/914,569	08/31/2001	Kazuyuki Miya	L9289.01177	8327

7590 06/15/2005

Stevens Davis Miller & Mosher
1615 L Street NW Suite 850
Washington, DC 20036

EXAMINER

KNOWLIN, THJUAN P

ART UNIT	PAPER NUMBER
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2642

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/914,569

Applicant(s)

MIYA, KAZUYUKI

Examiner

Thjuan P. Knowlin

Art Unit

2642

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 08/31/01:03/04/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections – 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Tanaka et al (US 6,347,220).
2. In regards to claims 1, 6, 7, and 9, Tanaka discloses a communication terminal unit (See Fig. 1 and mobile station 12), base station apparatus (See Fig. 1 and wireless base station 11), and method comprising: an adaptive array antenna receiving means (See col. 1 lines 15-25 and col. 6 lines 1-22) for receiving signals from communication terminals (See Fig. 1 and mobile station 12) by an adaptive array antenna (See Fig. 1, array antenna {AAT₁}, and array antenna {AAT₂}) with a receiving directivity pattern obtained in advance (See col. 1 lines 27-46, col. 2 lines 15-50, col. 6 lines 1-22, and col. 7 lines 26-38); a correlation level detecting means (correlation calculation units CR1-CR4) for detecting a correlation level for said respective receiving directivity patterns (See col. 10-11 lines 65-39); and a means (synchronous detector SDM) for detecting said already-known signal section of a random access channel signal by using the

results of the detection of correlation level and for detecting dispreading timing of said already-known signal section (See col. 6 lines 23-42, col. 7-8 lines 64-30, and col. 10-11 lines 65-17).

3. In regards to claims 2 and 10, Tanaka discloses the base station apparatus and method, wherein said receiving directivity pattern is a receiving directivity pattern, which is obtained group by group after said respective communication terminals are grouped on the basis of a direction of arrival of signals from said respective communication terminals (See col. 1 lines 27-46, col. 2 lines 15-50, col. 6 lines 1-22, and col. 7 lines 26-38).

4. In regards to claim 3, Tanaka discloses the base station apparatus, wherein a message section of a random access channel is received by an adaptive array antenna with said receiving directivity pattern (See col. 1 lines 47-58, col. 6 lines 1-22, and col. 6 lines 43-48).

5. In regards to claim 4, Tanaka discloses the base station, further including means for selecting a signal pattern corresponding to the already-known section of said random access channel signal, and means for transmitting said signal pattern with a transmission directivity pattern that is obtained on the basis of said receiving directivity pattern (See col. 1 lines 27-46, col. 2 lines 15-50, col. 6 lines 1-22, and col. 7 lines 26-38).

6. In regards to claim 5, Tanaka discloses the base station, wherein dispreading timing of said already-known signal section of random access channel signals is used

as the dispreading timing of a message section continued from the said already-known signal section (See col. 6 lines 23-42, col. 7-8 lines 64-30, and col. 10-11 lines 65-17).

7. In regards to claim 8, Tanaka discloses the communication terminal unit, wherein said demodulating means (See Fig. 7 and demodulator 24) is informed by an upper layer of an instruction that demodulation is carried out by using said reference signal for channel estimation (See col. 7 lines 26-38, col. 8 lines 31-58, and col. 11 lines 56-63).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kobayakawa et al (US 6,064,338) teach an array antenna system of wireless base station.


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thjuan P. Knowlin whose telephone number is (571) 272-7486. The examiner can normally be reached on Mon-Fri 8:30-5:00pm.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar can be reached on (571) 272-7488. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2642

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thjuan P. Knowlin


AHMAD F. MATAR
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2700